#### STATE OF WASHINGTON DEPARTMENT OF ECOLOGY

### AGREED ORDER NO. DE 3154 FIRST AMENDMENT

in the Matter of Remedial Action by:		
Abitibi Consolidated Sales Corporation	) ) )	AGREED ORDER NO. DE 3154

Site: Abitibi Consolidated Sales Corporation, 4302 Chambers Creek Road, Steilacoom, WA.

To: Abitibi Consolidated Sales Corporation c/o AbitibiBowater 1155 Metcalfe Street, Suite 800 Montreal, Canada H3B 5H2 Attn: Nicole Roy

#### I. Amendment

Agreed Order No. DE 3154, signed November 29, 2006, is hereby amended to include a Final Cleanup Action Plan (CAP) and Environmental Covenant for the Site. The CAP is included as Exhibit A and a Model Environmental Covenant is included as Exhibit B, and are integral and enforceable parts of the Order. This amendment does not replace or change the existing requirements of the Agreed Order, which shall remain in effect.

#### II. Background

Agreed Order No. DE 3154, signed November 29, 2006, required Abitibi Consolidated Sales Corporation (Abitibi) to prepare a draft and final Remedial Investigation Report and Feasibility Study (RI/FS), to perform an interim action to remove petroleum hydrocarbon impacted soils, and to prepare a draft Cleanup Action Plan for the Site. Abitibi had initially planned on entering the Site in the Voluntary Cleanup Program (VCP), but was notified by Ecology that the Site should be subject to an Agreed Order. This process was started upon Ecology issuing a PLP Determination dated March 9, 2006. Because Abitibi had anticipated being in the VCP, much of the investigation work

was completed before the Agreed Order was issued. Abitibi had already mobilized to finish the RI, to begin removal of petroleum hydrocarbon impacted soils, and to install monitoring wells to monitor the efficacy of the cleanup. They were permitted to continue their work while the administrative process proceeded.

The RI concluded that as a result of the soil removal action, soil at the Site meets Model Toxics Control Act (MTCA) Method B cleanup levels. Groundwater at the Site had been impacted by historical petroleum releases and after completion of the 2006 soil removal action, contained concentrations of volatile (VOCs) and semivolatile organic compounds (SVOCs) above MTCA Method B cleanup levels. Arsenic in groundwater was found to result from mobilization of naturally-occurring arsenic in Property soil due to biological activity associated with petroleum hydrocarbon degradation. It is expected that withdrawal of near surface ground water will be prohibited, as a condition of institutional controls.

The RI/FS concluded that concentrations of petroleum hydrocarbons and polynuclear aromatic hydrocarbons (PAHs) were above cleanup criteria for unrestricted use (CULs) in soil in the vicinity of the Shipping Warehouse and in a portion of the railroad area. It is expected that soil containing low levels (above CULs) of PAH will be removed and properly disposed if and when the railroad area is removed upon facility demolition, as a condition of institutional controls.

The Feasibility Study completed for the Property evaluated alternatives for cleanup of petroleum hydrocarbons in groundwater. The Selected Remedial Alternative has been identified as monitored natural attenuation in groundwater, following the soil removal action. The CAP provides documentation to support the cleanup effort and summarizes information describing the cleanup for the Site.

Since petroleum hydrocarbons still remained in Site groundwater above MTCA cleanup standards, the Selected Remedial Alternative for groundwater was determined to be quarterly sampling for Constituents of Concern (COCs) utilizing Monitored Natural Attenuation (MNA) analytical parameters to determine a point at which the groundwater contamination would attenuate to levels below MTCA cleanup levels. Groundwater monitoring would continue until four consecutive quarterly samples demonstrate that concentrations of COCs are below the remedial action cleanup levels identified for the Site.

Petroleum compounds are typically highly biodegradable. Because the source of TPH impacts to groundwater had been removed, restoration was expected to occur relatively quickly. Geochemical data collected at the Site include dissolved oxygen and oxidation-reduction potential. Dissolved oxygen was low, and ORP was negative. Both of these suggested that aerobic degradation of petroleum compounds was occurring. Because the asphalt pavement over the Site was removed during the soil removal action, additional dissolved oxygen from surface water infiltration was expected to accelerate natural degradation processes.

Abitibi provided Ecology with a report West Tacoma Mill Summary Groundwater Monitoring Report, dated July 16, 2008 based on seven rounds of quarterly MNA

groundwater sampling. The report concludes that all of the petroleum hydrocarbon COCs had remained below MTCA cleanup standards and had met MNA criteria for four consecutive quarters. The report also noted that arsenic remained above the MTCA cleanup level of 0.058 ug/L, but had generally been declining since beginning monitoring in October 2006.

#### II. Work to be Performed

It is hereby ordered that Abitibi:

Abitibi Consolidated Sales Corporation

- 1. Enter the Ecology approved Cleanup Action Plan as an integral and enforceable part of Agreed Order DE 3154.
- 2. File an Environmental Covenant consistent with the Model Environmental Covenant attached as Exhibit B, particularly Section1, requirements 2 and 3 a to address the arsenic that remains in groundwater above the MTCA cleanup level and the PAH impacted soils that remain along the railroad area.

#### Schedule:

- 1. The Final Cleanup Action Plan will be entered as a function of Ecology signing this Agreed Order Amendment at the end of the required 30 day comment period, unless public comment results in the need to generate a Responsiveness Summary. If the latter occurs, signing and entry would occur upon Ecology issuing a Responsiveness Summary.
- 2. An Environmental Covenant shall be filed by the Site Owner with the Pierce County Auditor in accordance with WAC 173-340-440 within 30 days of entry of this Amendment.

Effective Date of this Amendment:
By:
Rebecca S. Lawson, P.E.
Section Manager
Toxics Cleanup Program
Southwest Regional Office
By:
Name: JACQUES P. JACHON
Position: SECLETARY

# EXHIBIT A DRAFT CLEANUP ACTION PLAN

## EXHIBIT B MODEL ENVIRONMENTAL COVENANT